

ABSTRACT

An improved User Plane location based service (LBS) architecture and message flow, enabling seamless User Plane location based services even when a mobile or wireless device has roamed among
5 different carrier networks. The present invention overcomes constraints inherent in the current protocol for roaming support defined by the Secure User Plane Location Service specification. A location system is enabled to automatically fall back to a message tunneling mechanism to ensure the security of a communication path between the location service system
10 and the target wireless device, ensuring that the communication path is uninterrupted as the wireless device travels.